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REMARKS

Claims 1-20 are pending in the present application. In the Office Action mailed June 3, 2004, the Examiner rejected claims 1-2, 5, and 8 under 35 U.S.C. §102(e) as being anticipated by Gu et al. (US 2003/0030534 A1). The Examiner next rejected claim 3-4 under 35 U.S.C. §103(a) as being unpatentable over Gu et al. in view of Kobayashi (JP 55-105310). Claims 6, 9-13, 15-16, and 18-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Gu et al. in view of Kobayashi and Tobben et al. (USP 4,596,974). Claims 14 and 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Gu et al. in view of Leuck et al. (USP 3,665, 358).

Applicant has amended paragraph 0026 of the Specification to correct a typographical error found therein. No new matter has been added.

With respect to the reference JP 55-105310, Applicant is unsure of the correlation of the name "Kobayashi", as used by the Examiner, to the reference. The inventor's name printed in the abstract is "Nakano Katsuaki," and the applicant's name is printed as "Toshiba Electric Equip Corp." Applicant assumes that the patent number JP 55-105310 used by the Examiner is the intended reference. Therefore, remarks discussing this patent in the remarks below will refer to this patent as "Katsuaki."

Also with respect to Katsuaki, above and beyond the patentable distinctions addressed below, Applicant would like to remind the Examiner that rejections based on abstracts are generally considered improper. MPEP §706.02. As is widely recognized, abstracts are commonly misleading, inaccurate, and incomplete. As such, MPEP §706.02 is clear that abstracts should only be relied upon in very limited circumstances. Specifically, "[i]n limited circumstances, it may be appropriate for the examiner to make a rejection in a non-final Office action based in whole or in part on the abstract only without relying on the full text document. In such circumstances, the full text document and a translation (if not in English) may be supplied in the next Office action." Id. As such, should the Examiner find the remarks herein unpersuasive, Applicant hereby requests the Examiner provide an English translation of the full text of Katsuaki, JP 55-105310, with any subsequent action. Additionally, any such action should be provided in a non-final office action in accordance with MPEP §706.02.

The Examiner rejected claim 1 under 35 U.S.C. §102(e) as being anticipated by Gu et al.. Applicant has amended claim 1 to more clearly define that which is claimed. Claim 1 calls for, in part, a bobbin having a molded body with a flange centrally disposed between a first end and a second end wherein the single flange is constructed to directly engage a pair of ferrite cores such

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that a uniform gap is formed between the pair of ferrite cores. While Applicant does not necessarily disagree that the flange of Gu et al. is centrally disposed on the bobbin disclosed therein, the flange of Gu et al. is not constructed to directly engage the pair of ferrite cores as presently called for in claim 1. Specifically, Gu et al. requires an electrical shield 22, as shown in Fig. 2, be disposed between at least one of the cores 12b and the flange of the bobbin. That is, Gu et al. teaches disposing an electrical shield between the bobbin and the ferrite core thereby preventing direct engagement therebetween.

Gu et al. discloses a plastic bobbin 24 and an electrostatic shield 22 positioned in the bobbin 24 that "electrically isolates primary winding 12 from secondary winding 16 and also electrically isolates core first core portion 12a from second core portion 12b." Paragraph 0016. Gu et al. also discloses that "[e]lectrostatic shield 22 is shaped and positioned such that it lies between the first core portion and the second core portion, and may be further positioned such that it lies between the primary winding and the secondary winding." Paragraph 0017 (emphasis added). That is, shield 22 is positioned between a flange of the bobbin and the cores to maintain isolation therebetween. Gu et al. further states that an optional second electrostatic shield 22' may be positioned between core portions 12a and 12b (see paragraph 0022) and that the electrostatic shields 22 and 22' "conduct any capacitive displacement electrical currents back to the source of the electrical currents, thereby minimizing electromagnetic radiation from transformer assembly 10." Paragraph 0023. Gu et al. continues, stating that "[a]n electronic device according to the invention is advantageous because capacitive displacement charges between both windings and between core halves are significantly attenuated" (paragraph 0024) and that "[a] transformer shield according to the invention inhibits capacitive displacement currents flowing between core portions of a transformer without significantly affecting the magnetic properties of the core portions." Paragraph 0026.

Claim 1 calls for, in part, a bobbin having a molded body with a flange centrally disposed between a first end and a second end wherein the single flange is constructed to directly engage a pair of ferrite cores such that a uniform gap is formed between the pair of ferrite cores. As discussed above, only one of the pair of ferrite cores of Gu et al. is directly engages with the flange of the bobbin. As such, that which is called for in claim 1 is not shown or disclosed in Gu et al.. Furthermore, as addressed below with respect to claim 16, the art of record fails to teach, suggest, or disclose a bobbin having a flange centrally disposed thereon and constructed to directly engage a pair of ferrite cores. More specifically, as addressed further below with respect to claim 16, the art of record teaches away from such a construction. For all the reasons set forth

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above, Applicant believes claim 1, and those claims that depend therefrom, are patentably distinct over Gu et al. individually or in combination with the art of record.

The Examiner next rejected claim 9 under 35 U.S.C. §103(a) as being unpatentable over Gu et al. in view of Katsuaki and Tobben et al. The Examiner stated that "Gu et al. in view of [Katsuaki] discloses the instant claimed invention except for the specific spring clips," and that "Tobben et al. discloses a bobbin [figure 3], a pair of cores supported in the bobbin and a pair of spring clips [49] designed to engage projections [65] on the bobbin." Office Action, p. 4.

Claim 9 has been amended to further define that which is claimed therein. As amended, claim 9 calls for, in part, a pair of securing devices oriented transversely to the pair of ferrite cores to secure the pair of ferrite cores to the plastic bobbin. The prior art does not teach or suggest that which is called for in claim 9. Neither Gu et al., Katsuaki, nor Tobben et al. teach or suggest a pair of securing devices oriented transversely to the pair of ferrite cores to secure the pair of ferrite cores to the plastic bobbin.

Additionally, Tobben et al. discloses securing ferromagnetic cores to coil formers 1 and 3 with a resilient device 49 aligned with the ferromagnetic cores. Tobben et al. states that "[t]he resilient device 49 in this embodiment consists of a spring-clip, whose two rectangular ends 61 are bent and are provided with apertures 63 adapted to cooperate for securing the spring clip with projections 65 which are formed on the side plates 35." Col. 4, lns. 3-7. The projections 65 receive the apertures 63 formed in the sides 61 of the resilient device 49. See Fig. 3 and col. 4, lns. 7-11. Barb shaped hooks 43, formed on the side parts 31a, form snap-connections together with recesses 45 in the central part 31b. See col. 3, lns. 25-27. Tobben et al. teaches that "[t]hese snap connections serve to prevent the inner coil former 3 from slipping out of the outer coil former 1." Col. 3, lns. 29-31. Tobben et al. further states that "[t]he function of the snap connections 43,45 is . . . taken over by the resilient device 49." Col. 4, lns. 24-26. That is, the resilient device 49 must be generally aligned with the cores to secure the portions of inner coil former 3 and outer coil former 1 together. Securing the resilient device 49 to the inner coil former 3, i.e. in an orientation transverse to the orientation of the cores as presently called for in claim 9, would cause the coil formers 1 and 3 to be pulled away from each other. Each of the resilient devices exerts a force which drives the relevant core parts together.

Tobben et al. further discloses the importance of orienting the spring clips in general alignment with the respective cores. Tobben et al. states that "[i]f the resilient device 49 was secured to the inner coil former 3, the coil formers 1 and 3 would be pulled away from each other due to the fact that each of the resilient devices exerts a force which drives the relevant core part

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inwards and consequently drives the relevant coil former outwards." Col. 4, lns. 33-38. Tobben et al. further states that "it is of major importance that the first outer end portion has recess by which the first inner end portion 25 is received in a manner such that the resilient device 49 engages only the first outer end portion and the first core part 47 and does not engage the first inner end portion." Col. 4, lns. 42-47. As such, Tobben et al. expressly teaches away from orienting the spring clips generally transverse to the core as called for in claim 9. Additionally, any combination of references which positions a spring clip transverse to the core/bobbin structure of Tobben et al. would render the transformer of Tobben et al. inoperable for its intended purpose. That is, the transformer, as stated by Tobben et al., would fall apart. As such, at least for those reasons provided above, Applicant believes claim 9, and those claims that depend therefrom, are patentably distinct over the art of record.

The Examiner next rejected claim 16 under 35 U.S.C. §103(a) as being unpatentable over Gu et al. in view of Katsuaki and Tobben et al. The Examiner stated that "Gu et al. in view of [Katsuaki] discloses the instant claimed invention except for the specific spring clips." Office Action, pg. 4. However, the Examiner has not set forth how Gu et al. in view of Katsuaki discloses that which is called for in claim 16. Claim 16 calls for, in part, a pair of ferrite cores and a molded bobbin having a centrally positioned flange configured to engage opposing faces of the pair of ferrite cores so as to maintain a uniform separation between the pair of ferrite cores.

It is generally known that to support a *prima facie* case of obviousness, the Examiner must provide one or more references that were available to the inventor and that teach a suggestion to combine or modify the references, such that the combination and modification of which would appear to be sufficient to have made the claimed invention obvious to one of ordinary skill in the art. The failure to establish any one of these elements prevents a *prima facie* case of obviousness from being established thereby requiring withdrawal of the Examiner's rejection. Further, the Examiner must examine the rejected claims as a whole and without the advantages of hindsight to determine if the rejected claims are obvious in light of the cited references. That is, it is improper for the Examiner to piece together the limitations of the claimed invention using the claims as a guide without providing any suggestion or motivation as to why it would have been obvious to one of ordinary skill and knowledge in the art to combine the various prior art references. As a result, a rejection of a claim under 35 U.S.C. §103(a) is improper if the claimed invention is employed as an instruction manual to combine the teachings of the prior art references so that the claimed invention is rendered obvious. Simply, "One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to

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deprecate the claimed invention". (In Re Fritch, 972 F.2d 1260, 23 USPQ. 2d 1780, 1784 (Fed. Cir. 1992) citing In Re Fine, 837 F.2d 1071, 1075, 5 USPQ. 2d 1596, 1600 (Fed. Cir. 1988)).

The aforementioned clearly establishes that the claims cannot be used as an instruction manual when substantiating an obviousness rejection. That is, merely referencing a number of patents or publications that individually teach or suggest a particular element of the claimed invention cannot be used to support a §103(a) rejection absent some showing in the references themselves for combining the references in such a manner as suggested by the Examiner. Simply, the references relied upon by the Examiner — and not the Examiner — must provide motivation or suggestion that would lead one skilled in the art to combine or modify the references to render the claimed invention. As stated by the Federal Circuit In Re Fritch, "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested desirability of the modification." As such, a §103(a) rejection cannot be sustained absent a motivation to combine that is found within the references themselves.

Gu et al. discloses a plastic bobbin 24 and an electrostatic shield 22 positioned in the bobbin 24 that "electrically isolates primary winding 12 from secondary winding 16 and also electrically isolates core first core portion 12a from second core portion 12b." Paragraph 0016. Gu et al. also discloses that "[e]lectrostatic shield 22 is shaped and positioned such that it lies between the first core portion and the second core portion, and may be further positioned such that it lies between the primary winding and the secondary winding." Paragraph 0017 (emphasis added). That is, shield 22 is positioned between a flange of the bobbin and the cores to maintain isolation therebetween. Gu et al. further states that an optional second electrostatic shield 22' may be positioned between core portions 12a and 12b (see paragraph 0022) and that the electrostatic shields 22 and 22' "conduct any capacitive displacement electrical currents back to the source of the electrical currents, thereby minimizing electromagnetic radiation from transformer assembly 10." Paragraph 0023. Gu et al. continues, stating that "[a]n electronic device according to the invention is advantageous because capacitive displacement charges between both windings and between core halves are significantly attenuated" (paragraph 0024) and that "[a] transformer shield according to the invention inhibits capacitive displacement currents flowing between core portions of a transformer without significantly affecting the magnetic properties of the core portions." Paragraph 0026.

Claim 16 calls for a bobbin having a flange configured to engage opposing faces of a pair of ferrite cores. Gu et al. does not teach or suggest a flange configured to engage opposing faces

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of the pair of ferrite cores. Instead, as stated above, Gu et al. teaches the use of the electrostatic shield positioned in a bobbin between the bobbin and core halves to displace charges between the windings and core halves. It is clear, as cited above and further recited in the claims of Gu et al., that the "invention" of Gu et al. is disposing a shield separate from the bobbin between the cores of the transformers. As such, it is not the faces of a pair of ferrite cores that engage the bobbin, as called for in claim 16, but only one of the core faces. The second core is prevented from engaging the flange by the electrostatic shield positioned between the core and the flange of the bobbin.

Furthermore, according to the English language abstract of Katsuaki, the purpose of the invention disclosed therein is "[t]o improve the insulation between the cores, keep the gap length between the cores in constant and simplify the production of a transformer without increasing a number of parts by a method wherein a spacer made in one body with a coil bobbin is placed between the cores." Katsuaki states, "[a] spacer 6 having an enveloping fringe 6a is formed previously on a coil bobbin 5...." Abstract. Katsuaki further states that "the spacer is made to contact with the end part of the core 1. Then confronting with the core 1, the secondary core 2 wound with the secondary coil 4 is inserted...." *Id.* Katsuaki also states, "By the enveloping fringe 6a of the spacer 6, the insulation is improved and the location of the core 1 and the spacer 6 can easily be determined. Moreover the gap length between the core 1 and 2 is kept in constant, a number of parts is reduced and simplify the production." *Id.* That is, as clearly shown in Fig. 2 of Katsuaki, spacer 6 is positioned at one end of the bobbin to form a simple and compact transformer assembly. As such, Katsuaki teaches away from forming a bobbin with a flange centrally positioned thereon as called for in claim 16.

There is no motivation in either Gu et al. or Katsuaki to be combined to create the instant claimed invention. As stated above, Gu et al. discloses the use of the electrostatic shield positioned in a bobbin between at least one of the core halves. Also, Katsuaki does not teach or suggest a molded bobbin having a centrally positioned flange configured to engage opposing faces of the pair of ferrite cores so as to maintain a uniform separation between the pair of ferrite cores. Additionally, Gu et al. teaches away from allowing the faces of the pair of ferrite cores from engaging the flange disclosed therein and Katsuaki teaches away from positioning the flange disclosed therein centrally on the bobbin. Not only is that which is called for in claim 16 taught away from in the art of record, but the Examiner's interpretation of the references relied upon deprecates the claimed invention by using hindsight reconstruction to pick and choose among isolated disclosures in the prior art. As such, the Examiner has failed to establish a *prima*

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facie obviousness §103 rejection in accordance with 35 U.S.C. §103(a). Therefore, at least for the reasons set forth above, Applicant believes claim 16, and those claims that depend therefrom, are patentably distinct over the art of record.

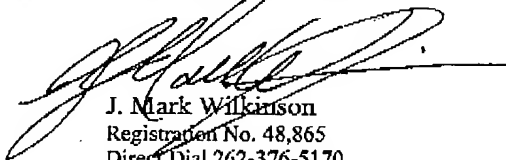
New claims 21 and 22 are also presented herein. The art of record fails to disclose a bobbin constructed in accordance therewith. As such, claims 21 and 22 are believed to be patentably distinct thereover.

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1-22.

A Credit Card Authorization in the amount of \$120.00 is included herewith for entry and consideration of the claims newly presented herein.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,



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